

Haoying Zhang

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 [LinkedIn Profile](#) |  [Github \(Master projects\)](#) |  [GitLab \(PhD projects\)](#)





Palaiseau, Ile de France - 91300, France

PhD student specializing in privacy-enhancing technologies for time-series data. I am seeking a cybersecurity position, either in academia or industry, starting in September 2026, based in Montréal or the surrounding area in Canada.

EDUCATION

- **Inria de Saclay and INSA** September 2023 - August 2026
PhD in Computer Science (Expected)
Palaiseau, France
 - Privacy-Enhancing Technologies with Time Series
 - **Supervisors:** Benjamin Nguyen, Nicolas Ancaux
- **Institut National des Sciences Appliquées (INSA)** September 2018 - Juin 2023
Engineering Master's Degree (Double Degree with Master of Research in Cybersecurity)
Rennes, France
 - Major: Computer Science
 - Grade: 15.17/20 (Rank: 3/74)

EXPERIENCE

- **ENSTA Paris**  September 2023 - Present
Teaching Assistant
Palaiseau, France
 - Taught Oracle Database to second-year engineering students
 - Prepared materials (VMs, servers) and supported students with exercises and individual problem-solving
 - Co-supervised an master student's research internship at Inria
- **INSA CVL**  February 2023 - August 2023
Research Intern
Bourges, France
 - Research internship with topic "Privacy-Preserving Graph Processing"
 - Developed a framework called PUZZLE to compute PageRank on large distributed graph in a privacy-preserving way (with Differential Privacy guarantee)
- **NAGRA NexGuard**  May 2022 - August 2022
Intern
Rennes, France
 - Engineering internship with topic "High Performance Computing for Forensic Watermarking Algorithms"
 - Implemented Single Instruction Multiple Data (SIMD) architectures with vector processors on x86 and ARM
 - Integrated SIMD architectures into forensic watermarking algorithms to achieve high performance on multiple platforms
- **Huawei**  July 2021 - September 2021
Intern
Beijing, China
 - Engineering internship with topic "Routing Protocol Testing"
 - Learnt 8+ TCP/IP routing protocols
 - Designed the topologies and implemented automatic tests

PUBLICATIONS

C=CONFERENCE, J=JOURNAL

- [J.1] Haoying Zhang, et al. (2025). **TELESafe: Detecting Private/Work Boundary Crossings in Energy Consumption Trails in Telework**. In *VLDB Endowment*, pp. 1565 - 1578. ACM. 29 August 2025. DOI: 10.14778/3725688.3725690
- [C.1] Haoying Zhang, et al. (2025). **Demo: Exploring Utility and Attackability Trade-offs in Local Differential Privacy**. Accepted for publication in *CCS 2025*.
- [C.2] Haoying Zhang, et al. (2026). **Privacy Attacks on Matrix Profiles via Reconstruction Techniques**. Accepted for publication in *PETS 2026*.
- [C.3] Haoying Zhang, et al. (2026). **Demo of TELESafe: Monitoring Energy Consumption for Work-Life Boundaries in Telework**. Accepted for publication in *ICDM 2025*.

SKILLS

- **Programming Languages:** Assembly, C, C++, Python, Java, Rust, OCaml, Perl, Ruby, JavaScript, PHP
- **Database Systems:** MySQL, Oracle
- **Machine Learning:** Classification algorithms, RNNs, CNNs, GANs, etc
- **Cloud & Containerization:** Docker, Kubernetes
- **DevOps:** Git

PROJECTS

- **Mycelium**

September 2021 - Juin 2022

Tools: *Embedded system, C++, LoRaWAN, Raspberry Pi, Docker, Kubernetes*



- Implemented an alarm system in sensors to trigger actions based on weather scenarios
- Developed a Kubernetes-based fog infrastructure on a Raspberry Pi cluster for storing and processing sensor data transmitted via LoRaWAN, enabling monitoring of natural environments in Rennes
- Collaborated with scientists and engineers from Geosciences Rennes and Clermont-Ferrand University

- **Exchange Rate Reminder**

August 2020

Tools: *Python, InfluxDB*



- Developed a web-scraping application with data processing and storage in InfluxDB
- Implemented an email notification system triggered by exchange rate drops

- **Chessboard game**

August 2020

Tools: *JavaFx*



VOLUNTEER EXPERIENCE

- **Mathematics and Physics Tutor**

September 2018 - February 2019

INSA

- Tutored fellow students in mathematics and physics through classes and Q&A sessions

- **Volunteer at the Planetarium**

August 2014

Beijing Planetarium

- Guided visitors through exhibits and provided telescope demonstrations

ADDITIONAL INFORMATION

Languages: Chinese (Mother tongue), French (Fluent: DELF B2, 85/100), English (Fluent: TOEIC, 945/990)

Interests: Snowboarding, Badminton, Running, Astronomy